

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

VASUDEVAN SOFTWARE, INC.,

No. C 11-06637 RS  
No. C 11-06638 RS

Plaintiff,

v.

**CLAIM CONSTRUCTION  
CLARIFICATION ORDER**

MICROSTRATEGY INC.,

Defendant.

VASUDEVAN SOFTWARE, INC.,

Plaintiff,

v.

TIBCO SOFTWARE INC.,

Defendant.

**I. INTRODUCTION**

Plaintiff Vasudevan Software Inc. (“VSi”) alleges that the software products of defendants MicroStrategy, Inc. and TIBCO Software, Inc. infringe its U.S. Patent Number 7,167,864 (‘864 patent), and that MicroStrategy additionally infringes VSi’s U.S. Patent Numbers 6,877,006 (‘006 patent), 7,720,861 (‘861 patent), and 8,082,268 (‘268 patent).<sup>1</sup> Pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996), and

<sup>1</sup> Three of those patents were construed in part in a previous action by VSi against defendants IBM and Oracle. *See Vasudevan Software, Inc. v. Int’l Bus. Mach. Corp.*, No. C 09-5897, 2011 WL 196884 at \*1 (N.D. Cal. Jan. 20, 2011) (claim construction order).

1 Patent Local Rule 4-3, three terms found in the claims of the patents were construed in a September  
2 19, 2012 order (Claim Construction Order). As the litigation progressed, a dispute between the  
3 parties has emerged over the proper understanding of the construction of the term “disparate []  
4 databases” as “databases having an absence of compatible keys or record identifier columns of  
5 similar value or format in the schemas or structures that would otherwise enable linking data.”<sup>2</sup> The  
6 parties, recognizing that further clarification on the meaning of this term is necessary to resolve  
7 various pending motions for summary judgment of non-infringement and to exclude technical  
8 experts, request additional guidance from the Court.<sup>3</sup> For the reasons set forth below, the  
9 clarification advanced by MicroStrategy will be adopted.

## 10 II. BACKGROUND

11 The patents in suit relate to business intelligence software technology, and specifically, an  
12 alleged invention for dynamically creating, updating, and securing an online analytical processing  
13 (“OLAP”) cube. All of the asserted patents claim priority to a provisional application filed on July  
14 19, 2000 (the provisional application). That application originally claimed the ability to integrate  
15 data from multiple “digital databases.” In July of 2003, the PTO rejected that application’s pending  
16 claims in light of U.S. Patent No. 6,516,324 (Jones). In response, Mark Vasudevan, named inventor  
17 of each patent-in-suit, filed an amended application narrowing his claims to recite accessing only  
18 “disparate digital databases.” The PTO subsequently allowed the revised application to issue as the  
19 ’864 patent. During claim construction, VSi proposed that “disparate [] databases” be construed as  
20 “incompatible databases having different schemas.” That construction was rejected in favor of a  
21 construction nearly identical to that proposed by defendants. The legal standards applicable to the  
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23

24 <sup>2</sup> The claim term appears in claims 1 and 2 of the ’006 patent, claims 1 through 4 of the ’861 patent,  
25 and claims 1, 4, 26, and 29 of the ’864 patent.

26 <sup>3</sup> VSi also contends that “incompatible databases of different types” means something different than  
27 the Court’s construction of “disparate [] databases.” This argument is foreclosed, however, by the  
28 Claim Construction Order, which “disregarded” defendants’ claim differentiation theory that  
“incompatible” meant something other than “disparate.” See Claim Construction Order at 5, n.5.  
During claim construction, VSi *succeeded* in having its position adopted. It is estopped from now  
arguing to the contrary.

1 consideration of the parties' request for clarification follow those set forth in the initial Claim  
2 Construction Order.

3 **III. DISCUSSION**

4 Adopted Construction	5 VSi's Interpretation	6 MicroStrategy's Interpretation	7 TIBCO's Interpretation
8 databases having an 9 absence of compatible 10 keys or record 11 identifier columns of 12 similar value or 13 format in the schemas 14 or structures that 15 would otherwise 16 enable linking data	17 databases having an 18 absence of compatible 19 keys OR an absence 20 of record identifier 21 columns of similar 22 value OR an absence 23 of record identifier 24 columns of similar 25 format in the schemas 26 or structures that 27 would otherwise 28 enable linking data	29 databases having an 30 absence of compatible 31 keys AND an absence 32 of record identifier 33 columns of similar 34 value AND an 35 absence of record 36 identifier columns of 37 similar format in the 38 schemas or structures 39 that would otherwise 40 enable linking data	41 databases having an 42 absence of compatible 43 keys

12 The parties debate the appropriate scope of the limitation "disparate [] databases." VSi reads  
13 the adopted construction in the disjunctive, arguing that a product allowing an OLAP cube to be  
14 assembled from databases lacking *any one* of the features identified potentially infringes its patents.  
15 Thus, VSi contends that databases are disparate if they have an absence of compatible keys, *or* if  
16 they have an absence of record identifier columns of similar value, *or* if they have an absence of  
17 record identifier columns of similar format in the schemas or structures that would otherwise enable  
18 linking data. MicroStrategy interprets the construction conjunctively. Under this reading, disparate  
19 databases are only those that have an absence of compatible keys *and* an absence of record identifier  
20 columns of similar value *and* an absence of record identifier columns of similar format in the  
21 schemas or structures that would otherwise enable linking data. TIBCO takes a somewhat different  
22 tack by arguing that databases are disparate if and only if they have an absence of compatible keys,  
23 with the presence or absence in such disparate databases of record identifier columns of similar  
24 value or format in the schemas or structures that would otherwise enable linking data not affecting  
25 their disparate nature.

1       The construction about which the parties now seek clarification is nearly identical to that  
2 proposed by defendants during claim construction. VSi's proposed construction of "disparate []  
3 databases" as "incompatible databases having different schemas" was rejected in favor of  
4 defendants' proposed construction for a number of reasons. Most importantly, defendants'  
5 proposed construction was based on a statement made by VSi during prosecution of the '006 patent.  
6 The PTO initially rejected VSi's claims as obvious in light of prior art Jones, which, it noted,  
7 teaches a method of "accessing with a computer a plurality of digital databases," wherein "the  
8 plurality of databases are incompatible to each other." (Exh. A to Pak Decl. in Supp. of Defs.'  
9 Claim Constr. Br. at VSI0000239, 242). VSi responded by adding the limitation "disparate" to  
10 "digital databases" and arguing that the prior art "access[ed] only one singular database – the  
11 multidimensional database – not a plurality of disparate databases," as in the '006 application.  
12 (Exh. 21 to Enger Decl. in Supp. of VSi's Claim Constr. Br. at VSI0000267). As VSi went on to  
13 explain to the PTO:

14  
15       *The disparate nature of the above databases refers to the absence of compatible keys  
16 or record identifier (ID) columns of similar value or format in the schemas or  
17 structures of the database that would otherwise enable linking data within the  
18 constituent databases.* An example of such a common key is a social security number  
19 .... In embodiments of Applicant's invention, such a common key is not necessary.  
The disparate nature extends, for example, to the type of database (Oracle, IBM DB2,  
Microsoft SQL Server or Object Databases) and the structure, schema, and nature of  
the databases (i.e., type of the data fields in various tables of the constituent  
databases).

20 (*Id.* at VSI0000265) (emphasis in italics added, underline in original).

21       Given the Federal Circuit's guidance that patentees should be "bound by representations and  
22 actions that were taken in order to obtain the patent," the Claim Construction Order adopted  
23 defendants' position that VSi should be bound by its representation to the PTO, which VSi had  
24 again embraced during the prosecution of the '861 patent, in order to distinguish prior art Jones.  
25 *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed. Cir. 2011) (citations omitted);  
26 *see also* Claim Construction Order (citing *Springs Window Fashions LP v. Novo Indus., L.P.*, 323  
27 F.3d 989, 995 (Fed. Cir. 2003) ("The public notice function of a patent and its prosecution history

1 requires that a patentee be held to what he declares during the prosecution of his patent. A patentee  
2 may not state during prosecution that the claims do not cover a particular device and then change  
3 position and later sue a party who makes that same device for infringement”). Before the PTO, VSi  
4 had “clearly set forth a definition of the disputed term” and that definition, supported by the  
5 prosecution history, was adopted during claim construction. *Typhoon Touch*, 659 F.3d at 1382  
6 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)).

7 VSi now argues for a broad interpretation of the construction of the term “disparate []  
8 databases” previously adopted, such that the absence of any one of the three specified elements  
9 would be sufficient to render a database disparate. Once again, an examination of the prosecution  
10 history of the patents-in-suit indicates that VSi took a position before the PTO in order to  
11 distinguish its patent over prior art Jones contrary to the one it now advances. When VSi amended  
12 its claims to cover only “disparate digital databases” instead of “digital databases” in order to  
13 thereby overcome prior art Jones, VSi told the PTO, that “the component databases in Jones et al.  
14 rely on common keys that relate the data between the different tables and databases,” whereas “[i]n  
15 embodiments of Applicant’s invention, such a common key value is not necessary.” (Exh. 21 to  
16 Enger Decl. in Supp. of VSi’s Claim Constr. Br. at VSI0000266, VSI0000265) (underline in  
17 original). This is a clear representation to the PTO that an absence of compatible keys is necessary  
18 to render a database disparate such that it is distinguishable from the prior art.

19 The interpretation of the construed term that VSi now champions would allow “disparate []  
20 databases” to encompass those *with* common keys, as long as they had an absence of either record  
21 identifier columns of similar value *or* an absence of record identifier columns of similar format in  
22 the schemas or structures that would otherwise enable linking data. Such an interpretation is  
23 inconsistent with VSi’s earlier representation to the PTO that its invention is patentable because,  
24 unlike Jones, it allows data from databases lacking common key values to be related. While  
25 precedent sets a fairly high bar for disavowal during prosecution, requiring “a clear and  
26 unmistakable disavowal of scope,” here that requirement is met. *Purdue Pharm. L.P. v. Endo*  
27 *Pharms. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006).

1 VSi next points to its statement to the PTO that “[t]he disparate nature extends, for example,  
2 to the type of database (Oracle, IBM DB2, Microsoft SQL Server or Object Databases) and the  
3 structure, schema, and nature of the databases (i.e., type of the data fields in various tables of the  
4 constituent databases)” to argue that “an absence of record identifier columns of similar format in  
5 the schemas or structures that would otherwise enable linking data” *alone*, such as occurs when two  
6 databases are made by different manufacturers (for example, an Oracle and IBM database) should  
7 be sufficient to render databases disparate. (*Id.* at VSI0000265) (emphasis in italics added,  
8 underline in original). As noted in the Claim Construction Order, “the trouble with VSi’s position is  
9 that [MicroStrategy]’s construction is *not* necessarily inconsistent with the distinction drawn  
10 between databases supplied by different vendors – as VSi’s own statements to the PTO make quite  
11 clear.” Claim Construction Order at 7. Under MicroStrategy’s interpretation of the construction,  
12 databases from different vendors may be disparate as long as they have an absence of compatible  
13 keys, and an absence of record identifier columns of similar value, as neither side has suggested that  
14 they have identical record identifiers or formats within the structures or schemas organizing the  
15 data. VSi’s interpretation, by contrast, would automatically render databases from different vendors  
16 disparate *even if they had compatible keys*, a position inconsistent with the statements it made to the  
17 PTO in order to distinguish its patent applications over Jones.

18 The interpretation advanced by defendant TIBCO, however, goes too far in that, while it  
19 recognizes the necessity for “disparate [] databases” to have an absence of compatible keys, it would  
20 render the rest of the already-adopted construction of that term mere surplusage. During claim  
21 construction, TIBCO never argued that an absence of compatible keys alone would render databases  
22 disparate. Instead, it joined MicroStrategy in arguing that “disparate [] databases” are “databases  
23 having an absence of compatible keys or record identifier (ID) columns of similar value or format in  
24 the schemas or structures of the database that would otherwise enable linking data within the  
25 constituent databases.” The interpretation put forth by TIBCO essentially asks the Court not to  
26 clarify an already-adopted construction, but to reopen claim construction entirely, disregard its  
27 earlier claim construction position, and embrace a new construction inconsistent with the plain

1 language of both the Claim Construction Order and VSi's statements to the PTO during the  
2 prosecution of its patents.

3 VSi contends that the MicroStrategy's interpretation similarly strays from the plain language  
4 of the claim construction because it substitutes the word "or" for "and." The Federal Circuit has  
5 indicated "[t]he proper approach is to construe the claim language using standardized dictionary  
6 definitions [where] the claims have no specialized meaning." *Schumer v. Laboratory Computer*  
7 Sys., Inc., 308 F.3d 1304, 1311 (Fed. Cir. 2002). Consistent with that approach, the Federal Circuit  
8 has "consistently interpreted the word 'or' to mean that the items in the sequence are alternatives to  
9 each other." *Id.* Accordingly, the Federal Circuit has held, for example, that a district court erred in  
10 construing claim language stating "one of the following elements is different . . . : location of the  
11 point of origin, or angle of rotation, or scale" to mean that the system in question must be capable of  
12 translating all three of the listed elements, as opposed to translating "one of the following." *Id.* VSi  
13 warns that to adopt MicroStrategy's interpretation would be to commit similar error.

14 Yet, MicroStrategy's interpretation is not necessarily at war with the plain language of the  
15 claim term as previously construed, albeit for an initially counterintuitive reason. As MicroStrategy  
16 points out, a basic rule of logic known as De Morgan's law holds that the statement *not* (p or q) is  
17 equivalent to the statement (*not* p) and (*not* q) and, as a logical corollary, the statement *not* (p and q)  
18 is the same as (*not* p) or (*not* q). In this way, "a disjunction may be converted into a conjunction  
19 and a conjunction may be converted into a disjunction if (1) the quality (*i.e.*, either affirmative or  
20 negative) of the conjunction or disjunction is changed." *See John P. Finan, Lawgical:*  
21 *Jurisprudential and Logical Considerations* 15 Akron L. Rev. 675, 684 (1981) (discussing the use of  
22 De Morgan's law to interpret the Uniform Commercial Code and other statutory language). For  
23 example, Article II, Section 1 of the United States Constitution establishes that in order to be  
24 eligible to hold the office of President of the United States, a person must be a natural born citizen  
25 of this country *and* thirty five years old. Another way to state this same proposition is, in order to  
26 be eligible to hold the office of President, you must *not* be foreign born *or* under the age of thirty  
27 five. Similarly, consistent with common English usage and syntax, the construction of the claim

1 term “disparate [] databases” written as an *absence* of (A *or* B *or* C) is the same as an (*absence* of  
2 A) *and* an (*absence* of B) *and* an (*absence* of C). The basis for the clarification adopted by this  
3 order is grounded in the prosecution history of the patents-in-suit as opposed to grammatical rules.  
4 It is, nonetheless, instructive to note that the interpretation offered by MicroStrategy is consistent  
5 with the construction adopted in the Claim Construction Order, in light of the logical meaning of  
6 language as discussed above.

7 IV. CONCLUSION

8 The construction of “Disparate [] databases” as “databases having an absence of compatible  
9 keys or record identifier columns of similar value or format in the schemas or structures that would  
10 otherwise enable linking data” is clarified to read “databases having an absence of compatible keys  
11 and an absence of record identifier columns of similar value and an absence of record identifier  
12 columns of similar format in the schemas or structures that would otherwise enable linking data.”

13 IT IS SO ORDERED.

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15 Dated: 9/19/13



16 RICHARD SEEBORG  
17 UNITED STATES DISTRICT JUDGE

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